

Abstract of the Disclosure

In a method and system for luminance noise filtering, a region of pixel data directly from the image sensor is used for determining a virtually filtered luminance for a pixel location within the region. Luminance noise reduction is performed using the
5 region of pixel data directly from the image sensor such that frame memory is eliminated.

In addition, the present invention provides adaptive noise filtering by selecting the virtually filtered luminance as a final luminance for a darker image and by selecting a reference luminance without virtual noise filtering for a brighter image.